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MECHANICAL ENGINEERING

THE JOURNAL OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

AUGUST 1920

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SOCIETY AFFAIRS

The Secretary's Letter—New Officers to be Balloted On—Honors Conferred on A. S. M. E. Members—Professional Sections—The Engineering Societies Employment Bureau—Personals—Necrology—Employment Bulletin—Candidates for Membership

The Secretary's Letter

The Budget

THIS is the time which most persons think is vacation period in Society affairs. On the contrary, it is the time of greatest anxiety and trial to the officers of the Society and the Finance Committee, because the budget for the fiscal year, commencing October 1, must then be prepared. The first estimates must be made by the Finance Committee in July so that they may be submitted to the several committees of the Society in time for their consideration and comment for resubmission by the Finance Committee to the Council.

Notwithstanding the large sums, relative to other professional Societies, involved in the A. S. M. E. budget, we are pressed this year the most of any, due to the almost prohibitive costs of all publication work.

As the bulk of the Society's activities passes through the channels of the various publications, it can be seen that the cycle for all activities starts and ends with the scale of expenditure permissible for publications.

The Secretary regrets more than can be expressed that so many of the Society's forward movements must necessarily be restricted, for the reason that under even exceptional circumstances the outgo cannot exceed income.

Whereas the Society cannot, or rather ought not, accumulate a large surplus, our financial operations being restricted to converting current income into outgo beneficial to the members, yet good business management requires that we should live *within* our income, maintaining a modest surplus as a "surge tank," to use President Miller's expression, to maintain fundamental activities in years of higher expense, and to inaugurate progressive movements.

With the Society's increasing activities about one-third of the annual gross turnover has been recommended by the Finance Committee as a reasonable working capital or "surge tank." This amount, over $100,000, the Society now has.

The coöperation and patience of all members and committees is begged for the coming year.

Advertising Activities

In this connection, a word as to the part advertising plays in the Society's publications will possibly be helpful.

There has been an impression in some quarters that the Society makes a great profit from the advertising carried in its publications. From what has been said earlier in this letter, it is evident that this is not the case.

All of the income from advertising is appropriated by the Council for the benefit of the members in maintaining the Society's monthly publication Mechanical Engineering with its several departments, including the Engineering Index. As a matter of fact, considerably over $50,000 of the income from dues has to be added to the advertising income to carry all of the Publication Committee's activities.

The advertising income is steadily increasing with the merit and wide distribution of Mechanical Engineering and Condensed Catalogues, but under the present enormously increased printing costs it is not quite adequate to produce Mechanical Engineering with the many valuable features which it contains. If it did, more money would be available for sections work, local and professional, and for professional committees and research.

If all firms could know that the advertising revenue received from them was being used exclusively for maintaining a general technical publication which, in addition to being one of the most profitable of mediums for the manufacturer, due to its selected list of readers, over 16,000, is becoming almost indispensable to engineers, we are confident that an increasing number would feel justified in supporting these activities.

As it is, the Society is grateful to the many representative firms who are thus making possible so worthy a publication as Mechanical Engineering—with its valuable feature the Engineering Index, the most comprehensive in the English language.

Our Broader Work

It is estimated that the United States is $18,000,000,000 behind in its program due to the interruption of normal progress by the war.

The Engineering Societies Building has been chosen as the headquarters for the Senate Committee on Reconstruction and Production. The Senate Committee had other offers, but the dignity of our building and an atmosphere free from political or other interests made it the most desirable for such an activity. It is in keeping with the engineer's participation in public affairs that we should tender our facilities for such purposes.

It was indeed fortunate that the American Society of Civil Engineers had an office which could be spared during the summer, and at the suggestion of the United Engineering Society one of their rooms was put at the disposal of the Senate Committee. The Past-Presidents' room of the American Society of Civil Engineers will be used for hearings.

Representatives of the leading industries and captains of industry, economists and other specialists will immediately commence to assist the Senate Committee in laying out a comprehensive program for the restoration of our country to a normal basis. It is to be hoped that our Society can participate in some phase of the work.

When The Federated American Engineering Societies are in full swing such an activity will be a natural function of this organization.

Of the national societies that have signified their intention of joining the Federated Societies, The American Society of Mechanical Engineers is the first, and of the local societies, the Dallas (Texas) Engineering Club holds a similar honor.

Calvin W. Rice,
Secretary.

New Officers to be Balloted On

Before August 19, the Secretary will mail to every member entitled to vote a ballot stating the names of the candidates for President, three Vice-Presidents, three Managers and Treasurer, which offices fall vacant in December next. The names of the candidates for these offices were published in the July issue of Mechanical Engineering. The voting will close at ten o'clock in the forenoon of September 28. The Tellers will immediately canvass the ballots and certify the results to the Secretary on October 1. The Secretary will immediately announce the successful candidates, and their names will be published in the November issue of Mechanical Engineering. The new officers will be declared elected by the presiding officer on the first day of the Annual Meeting.

The virtue of this new method is that the new officers will be apprised of their election in advance of the administrative year. This will permit of their becoming acquainted officially with Society affairs, and later when they take office they will be enabled to administer the affairs of the Society to better advantage.

Honors Conferred on A.S.M.E. Members

THE following are brief sketches of the lives of five members of The American Society of Mechanical Engineers who have been signally honored by various organizations during recent months. They serve as an illustration of the fact that engineers are actively interested in public affairs and that their services are appreciated and publicly recognized.

Taylor Society Confers Honorary Membership Upon Carl G. Barth

Election to honorary membership in the Taylor Society is an honor that has been conferred upon but three men during the ten years of the Society's history. The third member, announcement of whose election was made by the president of the Society at its Rochester meeting on May 8, is Carl George Lange Barth. The high points of the life of Mr. Barth, who is senior member of the firm of Carl G. Barth & Son, are well described in the following quotation from the announcement of his election.

"Not because of his skill as a consulting engineer, for he is not alone in that competence; not because of his unexcelled mastery of the technique of scientific management, for others share with him such distinction; not because of his unique and lovable personality, for others are lovable and some even uniquely so; not because of the rugged integrity of his character, conspicuous though that be; but because of all of these in combination, and especially because of his application of pure science to the uses of management, do we thus honor ourselves and him.

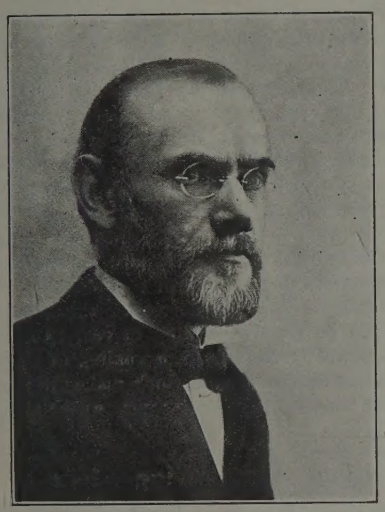
"As assistant to Mr. Taylor some twenty years ago, he brought to Mr. Taylor's genius as a scientist in management, the aid of his own genius in pure mathematics; to the data of which Mr. Taylor's vision inspired the acquisition, he applied the laws of mathematical logic and compelled a chaos of figures to yield its secret; then with that absolute and therefore practical command of his science, he devised the mechanism of a slide rule and put into its simplest form the answer which chaos had been compelled to give, making it available to the clerk in the planning room and to the foreman in the shop."

Edison Medal Presented to W. L. R. Emmet

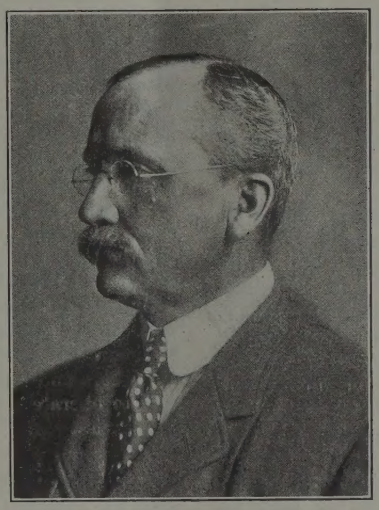
William Le Roy Emmet, consulting engineer for the General Electric Company, of Schenectady, New York, has been awarded the Edison Medal for inventions and developments of electrical apparatus and prime movers. The Edison gold medal was founded in 1904 by the Edison Medal Association, an organization composed of old associates and friends of Thomas A. Edison, and is awarded annually by a committee of 24 members of the American Institute of Electrical Engineers. The 1919 medal was presented to Mr. Emmet at the annual meeting of the Institute, May 21.

A graduate of the U. S. Naval Academy and an officer in the Navy during the Spanish War, Mr. Emmet was most appropriately chosen as a member of the Naval Consulting Board during the recent war. Here he devoted his time largely to the design and production of propelling machinery for naval vessels and merchant ships.

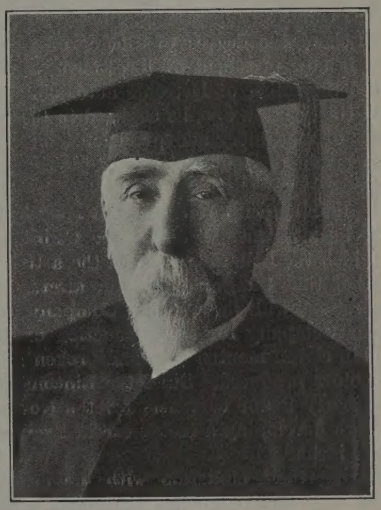
Mr. Emmet's principal civil employment has been with the Sprague Electric Railway and Motor Company, and the General Electric Company. He has achieved fame as an electrical engineer and as an inventor, and has obtained many patents for inventions in electricity, mechanics, and thermodynamics. His most important electric work has been in the development of the general use of alternating current and in the invention and design of ma-



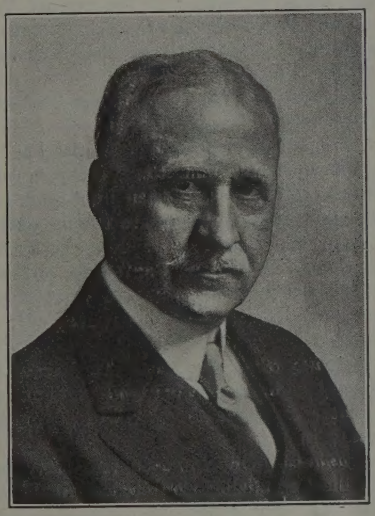
CARL G. BARTH



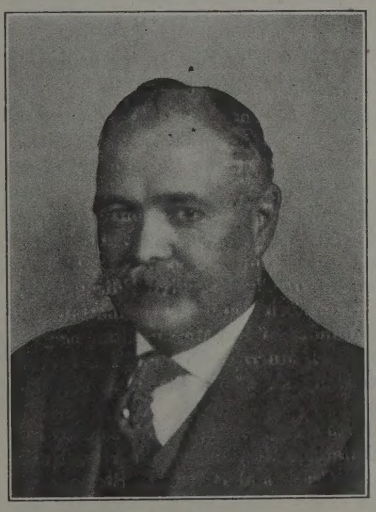
WILLIAM LE ROY EMMET



HENRY M. LELAND



SPENCER MILLER



THOMAS E. MURRAY

chinery to further the practical application of alternating current, while his most important mechanical work has been in connection with the development and introduction of the steam turbine.

Mr. Emmet has played an important part in the development of electric lighting, alternating-current distribution, air-blast transformers, oil circuit breakers, cable and generator insulation, steam turbines, electric ship propulsion. His most recent development is the mercury turbine, on which he is now engaged. His achievements have been as a pioneer of new methods rather than as an inventor, and much of his most original and most useful work could not be effectively patented nor perhaps even classified as invention.

Doctor of Engineering Degree Conferred Upon Henry M. Leland

The University of Michigan has recently conferred upon Henry M. Leland the degree of Doctor of Engineering. Mr. Leland, who is now president of the Lincoln Motor Company, has been called the father of Detroit's automobile industry. Going to Detroit thirty years ago, he engaged in the manufacture of the finer kinds of machinery and precision tools. He was also one of the pioneers in the manufacture of gasoline, marine and automobile engines.

In 1902 he, with Wilfred C. Leland and several prominent Detroit business men, founded the Cadillac Automobile Company, of which the Lelands remained the active heads until July, 1917. At that time the great need for aircraft led them to sever their connections with the Cadillac Company and organize the Lincoln Motor Company for the production of Liberty aircraft motors. Within eleven months they had broken all records in the number of motors produced. Since the Lincoln Motor Company finished its Liberty motor contracts for the Government, they have been at work developing a motor car in accordance with some of their newer ideals.

During their affiliation with the motor-car industry the Lelands with their engineers pioneered a number of the more important motor-car developments, among the outstanding of which were the electrical system of starting, lighting and ignition and the eight-cylinder high-speed, high-efficiency V-type engine.

Thomas E. Murray Made Doctor of Science by Villa Nova College

At its commencement exercises on June 9, Villa Nova College, Villa Nova, Pa., conferred the degree of Doctor of Science upon Thomas E. Murray, vice-president of the New York Edison Company and one of the foremost men in the electrical industry today. In addition to his association with The Edison Company, Mr. Murray is president of the Yonkers Electric Light and Power Company and vice-president of the United Electric Light and Power Company. He is a director of The Brooklyn Edison Company, the Electrical Testing Laboratories, and the Manhattan Refrigerating Company; is the founder of the Metropolitan Engineering Company and of Thomas E. Murray, Inc.; and has served in various capacities in practically all of the electrical associations and engineering societies.

Mr. Murray's most noteworthy engineering achievements include the planning of the Waterside Stations of the New York Edison Company, the Sherman Creek and Hell Gate Stations of the United Electric Light and Power Company, the plants of the Brooklyn Edison Company, and the hydroelectric development of the Chattanooga and Tennessee River Power Company. He bears the unique distinction of having installed more power-plant capacity than any other man.

In 1910 The Franklin Institute awarded Mr. Murray the Edward Longstreth Medal for his system of safety devices and protective appliances for interior electric wiring. Altogether Mr. Murray has been granted more than 350 patents, principally for electrical inventions. He received the degree of Doctor of Laws from Georgetown University in 1919 and for his research and productive work during the war he received a citation from the War Department.

Spencer Miller Honored for Services on Naval Consulting Board

The services of Spencer Miller as one of the representatives of The American Society of Mechanical Engineers on the Naval Consulting Board during the war, have been officially recognized by a testimonial of appreciation presented to him recently by the Navy Department. The organization of the Naval Consulting Board in 1915 marked the first time that civilians, representing the public through the national engineering societies, have been called into convention with officers of the Government to discuss problems of the Navy.

Mr. Miller's life has been largely devoted to the design and production of marine apparatus. His first noteworthy connection was with the Link-Belt Company of Chicago, as it was during this time that he designed a number of rope drives and apparatus for handling cargo from steamships, and also a method of equalizing the grip of the ropes on the pulleys of different diameters by varying the angles of the grooves. Since 1886 he has been associated with the Lidgerwood Manufacturing Company, of New York. At the time of his first connection with them the company had just begun to manufacture overhead-cableway systems employing the crude chain-connected fall-rope carriers. Mr. Miller developed an entirely new system known as the button-stop fall-rope carriers, which has been employed in the construction of U. S. fortifications, dams, filtration beds, sewers, open-pit mining, and the Gatun locks of the Panama Canal. He also perfected a system of log skidding by steam in the form of a cableway.

During the Spanish-American War he developed the marine cableway in solution of the problem of coaling at sea. To his credit are also the marine transfer for broadside coaling of ships in harbors and an automatic tension engine which makes it possible to operate a breeches-buoy apparatus between two ships in the heaviest sea.

Professional Sections Are Coming Along

Within the last month there have been five conferences of groups of members working on the Professional Sections, one of them being a meeting of the Special Committee on Professional Sections itself, and the outlook for the new activity is decidedly favorable. A synopsis of the progress of the various sections will be of interest.

Aeronautics. The Organizing Conference is about to be held. 188 members have registered.

Fuels. Following the organization of the Executive Committee and Sub-Committees, the program for the session at the Annual Meeting has been laid out and three speakers have accepted. 472 members are taking part.

Industrial Engineering. Nine hundred and thirty-seven invitations to an Organizing Conference on July 23 were being sent out as MECHANICAL ENGINEERING went to press. The program for the Annual Meeting session is laid out, and the session will be a good one.

Machine Shop Practice. The ticket for the Executive Committee has been selected and is about to be balloted on. 460 members are registered. Papers for the Annual Meeting are coming in.

Ordnance. One hundred and sixty members have registered, and the Organizing Conference will be held in the early fall.

Power. The Executive Committee is being selected and plans for the Annual Meeting are under way. This is a very large section, 843 members having registered.

Railroads. Four hundred members have registered and the Executive Committee has organized and has appointed over 60 members on Standing Committees as follows: *Meetings and Papers:* W. L. Bean, Chairman, G. M. Basford, Vice-Chairman, H. G. Bentley, H. Gardner, T. N. Gilmore, H. S. Hammond, R. D. Hawkins, G. S. Hillyer, A. L. Humphrey, L. J. Silcox, H. H. Vaughan, G. W. Wildin, John Dickson, P. Parke; *Information:* R. V. Wright, Chairman, J. T. Carroll, Vice-Chairman, A. B. Appler, W. A. Austin, G. W. Bacon, H. F. Ball, C. E. Chambers, D. F. Crawford, E. H. Dewson, F. L. DuBosque,

G. L. Fowler, C. S. Knapp, N. C. May, A. E. Ostrander, and G. R. Tuska; *Research:* W. E. Woodard, Chairman, B. B. Milner, Vice-Chairman, L. E. Endsley, J. B. Ennis, L. D. Freeman, L. H. Fry, C. E. Fuller, D. C. Jackson, W. F. Kiesel, H. B. MacFarland, W. O. Moody, J. E. Muhlfeld, J. A. Pilcher, Kenneth Rushton and E. C. Schmidt; *Membership:* Selby Haar, Chairman, A. C. Vauclain, Vice-Chairman, E. D. Campbell, C. C. Cromwell, D. J. Jones, V. L. Jones, R. Kearney, M. F. Kincaid, H. S. Knauer, C. R. Knowles, C. H. Knowlton, G. Lanza, J. M. MacMartin, John P. Neff, R. F. Peters and E. T. Spidy. A secretary of the section has also been selected. Plans for the Annual Meeting sessions will immediately be put under way by the Meetings and Papers Committee.

Textiles. Three papers for the Annual Meeting are under way and 101 members are registered.

Materials Handling. Through the initiative of Mr. Robert M. Gates, 381 members have petitioned the Council for a section on Materials Handling "for the purpose of promoting Mechanical Engineering as applied to the art of mechanical handling of all materials."

Power Transmission. Through the initiative of Mr. R. W. Sellew, 51 members have petitioned for a section on Power Transmission, and the Special Committee on Professional Sections is considering the relation of such a section to the Machine Shop Practice Section.

Organization of Standing Committee. After the majority of the sections have elected their Executive Committees, the Chairmen so elected will constitute the Standing Committee on Professional Sections, which is now provided for in the By-Laws. Then as soon as the Standing Committee begins to function the Special Committee will ask for its discharge. The Standing Committee will have a seat on the Council like the other Standing Committees.

Write to Your Society

The Society is always glad to be the medium for securing for members information upon their technical problems. A large number of inquiries are received, and the staff at headquarters is able, with its knowledge of the personnel of the Society, to refer the inquiries to the proper parties for reply.

Among recent inquiries received were those requesting information regarding training the physically handicapped, manufacture of paper boxes and cartons, equipment for making small taps and dies, manufacturers of brush-making machinery, welding cast and malleable iron, refrigerator to be operated by storage battery, concurrent-countercurrent barometric condensers, drums for shipping chemical materials, standard specifications of materials, pressure of piston rings against cylinder walls, shearing machines for cutting fiber, artificial gas production by gasification of coal, incinerating plants for factory use, mechanical methods of treating woods to harden them.

The Engineering Societies Employment Bureau

The United Engineering Societies Employment Bureau not only puts before applicants a list of positions available, but also puts before employers of engineers a list of capable men available. During the past year a large number of technical men have been served by this "clearing house" for engineering positions. In this age of specialists it is imperative that the proper man be placed in the proper place. This the bureau endeavors to do and it has been very successful because of the system of *accurately selected* men under which it operates. The qualifications of each applicant are indexed according to an elaborate though practical system which contains over 200,000 classifications. At the present time there are many specialized men available and many highly specialized positions open, not only in the United States, but in foreign countries: Brazil, Chile, India, British West Africa and elsewhere.

This organization serves members of the national engineering societies and non-members upon the presentation of a letter of reference or introduction from a member. Its address is: Engineering Societies Building, 29 West 39th Street, New York.

PERSONALS

CHANGES OF POSITION

C. H. BAKER has severed his connection with the Public Service Electric Company of Newark and is now affiliated with the Diamond Alkali Company, Painesville, Ohio.

R. H. WALLACE has resigned his position as general superintendent of the Savage Arms Corporation of Sharon, Pa., and is now employed as an engineer with the Parish Manufacturing Corporation of Reading, Pa.

GRANDON D. GATES, formerly assistant works superintendent of the Celluloid Company, Newark, N. J., is now general manager for the Davis-Watkins Dairymen's Manufacturing Company, Derby, Conn.

ROBERT R. NEILD is now associated with the John Inglis Company, Ltd., of Toronto, and the Nova Scotia Steel and Coal Company, New Glasgow, N. S. He was formerly with the Victoria Machinery Depot Co., Ltd., and the Coughlan Shipyards.

J. S. GREEN has resigned his position with the Southern Iron and Equipment Company of Atlanta, Ga., and entered the employ of the Canadian Ingersoll-Rand Co., in the Jenckes Plant at Sherbrooke, Quebec.

CHARLES F. SCRIBNER has resigned his position as vice-president and consulting engineer with the Business Service Corporation of Chicago to become consulting engineer, LaSalle Extension University, Chicago, Ill.

FRED C. MOSES, formerly designing engineer, Bethlehem Steel Company, Bethlehem, Pa., is now assistant mechanical engineer with the Aluminum Company of America, Pittsburgh, Pa.

J. W. BRUSSEL is now superintendent of motor plant, Willys Corporation, Elizabeth, N. J. He was formerly factory manager for the Dyneto Electric Corporation, Syracuse, N. Y.

M. H. ROBERTS has severed his connection as chief engineer with the Air Reduction Company, New York, to accept a similar position with the Franklin Railway Supply Company of New York.

W. E. ANDERSON and WARD RAYMOND, formerly chief engineers of Phillipsburg, N. J., with the A. S. Cameron Steam Pump Works and the Ingersoll-Rand Co., respectively, are now associated with the Pennsylvania Pump and Compressor Company, of Easton, Pa., the former as chief engineer and the latter as vice-president.

LEWIS E. KEIL has resigned his position as chief draftsman for the Texas and Pacific Railway and accepted a similar position in the car department of the United Railways of Havana.

W. JOCELYN DALE, formerly associated with the Elia Sugar Company of New York and Elia, Camaguey, Cuba, will be actively engaged as electrical and mechanical engineer in the construction and operation of the electrification of "Ingenio Cespedes" and will be located at Central Cespedes, Provincia de Camaguey, Cuba.

DANIEL M. BATES, formerly Major, U. S. A. and agent for the Lewiston Bleaching and Dye Works, is now vice-president of the Day & Zimmerman, Inc., engineers, Philadelphia, Pa.

J. C. PARMELY, who has been connected with the Okmulgee Ice & Light Company of Okmulgee, Okla., is now with The Milwaukee Electric Railway & Light Company.

WILFORD L. STORK has resigned his position of foundry superintendent of the Detroit Valve and Fittings Co., Wyandotte, Mich., to accept the position of works manager of McCord and Co., West Pullman, Ill., who make gray iron automobile cylinders, steel truck and railroad castings.

ALFRED C. DE LORME, associated with the Splitdorf Electrical Company of Newark, N. J., for five years, has severed his connection with that company and has accepted the position of engineer with the Van Sicklen Speedometer Company, Newark, N. J.

GEORGE H. SHARPE, formerly deputy administrative engineer, U. S. Fuel Administration for Connecticut, has been elected vice-president and general manager of the Pierce County Coal Company, whose mines are located at Spiketon, Wash.

CHARLES G. BARRETT, formerly sales engineer, marine department, Fairbanks Morse and Company, New York, has become associated with the Worthington Pump and Machinery Corporation, Blake & Knowles Works, East Cambridge, Mass.

W. H. FRIEND is now vice-president and general manager of the Burnrite Coal Briquette Engineering Company of New York. Formerly he was chief engineer for the Mashek Engineering Company.

STANLEY P. ROCKWELL has resigned his position as vice-president of Weekes-Hoffman Company, Syracuse, N. Y., to become metallurgist at the Whitney Manufacturing Company, Hartford, Conn.

CHARLES H. HAZLETON, formerly works engineer at the National Carbon Company, Inc., Cleveland, Ohio, has become connected with the Foote-Burt Company, Cleveland, in the capacity of superintendent.

HAROLD B. BUSE is leaving the Geometric Tool Company of New Haven to accept a position as sales engineer with Hill, Clarke & Co., of Boston, as their Connecticut representative.

WILLIAM TIETZE has severed his connections with the Citizens Light, Heat & Power Co., of Canby, Minn., and assumed the position of chief engineer of the B. F. Nelson Mfg. Co., of Minneapolis, Minn.

CECIL B. CLYNE has completed construction work for the Campania Minera del Mirasol, S. A., at Cusihiuriachic, Chihuahua, Mexico, and has been appointed superintendent of mill construction for the Moctezuma Copper Company of Nacozari, Sonora, Mexico.

CHARLES T. MAIN announces the enlargement of his organization to better prepare for engineering work of all kinds of industries, including textile mills, industrial plants, storage and terminal facilities, water-power and steam-power developments, and the examinations and reports on plants with reference to their value, reorganization or development. F. M. GUNBY has been appointed engineering manager and F. B. COLE is associated with Mr. Main as assistant engineer.

WILLIAM TIETZE has severed his connections with the Citizens milling department with the Puget Sound Machinery Depot and has taken charge of a branch office in Portland.

ANNOUNCEMENTS

E. CECIL POULTNEY has resigned his position with The American Car & Foundry Export Company, New York, N. Y.

CHARLES U. CARPENTER, formerly works manager, Recording & Computing Machines Company, of Dayton, Ohio, is now president and general manager for The National Industrial Engineering Company of Cincinnati, Ohio.

DR. ALPHONSE A. ADLER, for the past ten years professor in charge of machine and power-plant design at the Polytechnic Institute of Brooklyn, has resigned his position and will devote all his time to his practice as consulting engineer in power and industrial plant engineering, with office in New York City.

FRANK L. PLATT, formerly retained by the War Department as a specialist on industrial planning projects and late lieutenant in the Engineer Corps, has returned to civil life and has become associated with the firm of Waldron & Van Winkle, consulting engineers, of New York and Boston. Mr. Platt will be in the New York office.

JOHN B. MATTHEWS, formerly engineer, Moore Shipbuilding Company, Oakland, Cal., is now consulting engineer and surveyor, in San Francisco, Cal.

CHESTER E. WING, formerly associated in business with Charles M. Setzer, Charlotte, N. C., will open an office in Charlotte for the handling of high grade mechanical equipment.

M. O. LEIGHTON and Major C. T. CHENERY, members of the American Society of Civil Engineers, and A. C. OLIPHANT, associate member of The American Society of Mechanical Engineers and the American Institute of Electrical Engineers, have formed a copartnership under the name of M. O. Leighton & Company with offices in Washington, D. C., for the purpose of engaging in general engineering practice and industrial representation before the Federal departments. Mr. Leighton and Major Chenery will continue for the time being as chairman and secretary of the National Public Works Department Association, while Mr. Leighton and Mr. Oliphant will continue service in the Washington office of Engineering Council pending the displacement of that body by the Federated American Engineering Societies.

GANO DUNN, president of the J. G. White Engineering Corporation of New York, has been chosen second vice-chairman of the National Research Council for the year beginning July 1, 1920.

LESTER B. PATERSON has resigned his position as planning engineer of the Carrie Gyroscopic Corporation and has accepted a position with The American Locomotive Company, New York.

WILLIAM C. BRIGGS, associated with the Shepard Electric Crane & Hoist Co., as sales engineer and New York manager for the past twelve years, has purchased an interest in the Franklin Moore Co., Winsted, Conn., manufacturers of electric hoists, small electric cranes and spur geared chain block, and is vice-president in charge of manufacturing.

ELDRED E. BESSE, of Lowell, Mass., has become associated with the Hodgman Rubber Co., of Tuckahoe, New York, in the capacity of chief engineer.

L. K. SILLCOX, formerly master car builder, C. M. & St. P. Ry., Milwaukee Shops, Wis., has been appointed assistant general superintendent of motive power of that railway, Chicago, Ill.

The item in the July issue of MECHANICAL ENGINEERING concerning KENNETH B. MILLER refers to KENNETH B. MILLETT.

DR. RICHARD MOLDENKE delivered an address on the Production of Good Castings before the convention of the Southern Metal Trades Association, on June 17, at Atlanta, Ga.

FRANCIS W. SMITH has been transferred from the Elizabeth, N. J., to the Boston, Mass., branch of the American Agricultural Chemical Co.

O. C. THOMPSON has been transferred from the New York to the Rockaway, N. J., branch of the Wirebounds Corporation.

F. P. FISHER, who has been manager of the Gas Division of the Empire Gas and Fuel Company of Bartlesville, Okla., for the last eight years, has resigned his position. Mr. Fisher has contributed much to the development of the natural gas industry. His paper, Establishing a Standard of Measurement for Natural Gas in Large Quantities, is a recognized text on the subject, the principles therein set forth having now become almost universally applied. Mr. Fisher has been connected with several extensive gas interests and associations.

L. L. WILLARD, general superintendent of the business formerly carried on under the name of W. J. Rainey, is now vice-president of the concern, which has been incorporated and hereafter will be conducted under the name of W. J. Rainey, Inc.

APPOINTMENTS

P. E. CROSIER has been appointed superintendent of the Citizens Gas Company of Indianapolis, Ind. He has been serving this company in the capacity of assistant superintendent.

W. S. FINLAY, Jr., has been elected a vice-president of the American Water Works and Electric Company. He has resigned his position as superintendent of motive power of the Interborough Rapid Transit Company.

ALBERT L. PEARSON, formerly with the Bureau of Standards, Washington, D. C., is now assistant development expert in electricity, War Department, Education and Recreation Branch, Camp Grant, Ill.

REGINALD H. WOOD, Engineer Lieutenant, R. N., Chief Engineer, H. M. C. Naval Yard, Esquimalt, B. C., Canada, has been appointed Engineer Manager, H. M. C. Dockyard, Halifax, Nova Scotia.

NECROLOGY

ALLAN S. BIXBY

Allan S. Bixby, general manager of the National Malleable Castings Co., Indianapolis, Ind., died on June 12, 1920. Mr. Bixby was born in Philadelphia, Pa., in 1870. He was graduated from Rose Polytechnic Institute in 1892 and started work with the Ewart Manufacturing Co. of Indianapolis, now one of the branches of the Link-Belt Co. With one or two unimportant interruptions he continued with that company until 1902 when he resigned his position as superintendent to associate himself in a similar capacity with the Indianapolis works of the National Malleable Castings Co.

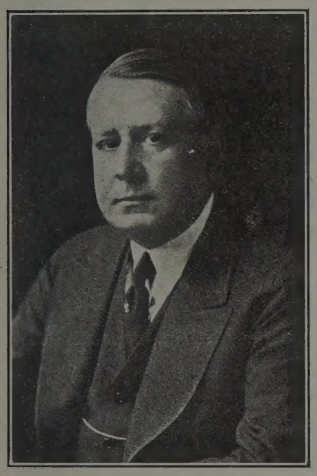
Mr. Bixby's earlier work was primarily in the design and construction of automatic tools and similar equipment. In later years his attention was diverted toward plant management, industrial relations, etc., in which field he did noteworthy work just before and during the War.

In 1919 he was awarded the degree of M. E. by his Alma Mater on his professional record. He became a member of the Society in 1907. He was also a member of a number of local organizations, including the Indianapolis Chamber of Commerce, to the Industries Committee of which he gave much time and attention.

LOUIS L. BRINSMADE

Louis L. Brinsmade was born in Elmira, N. Y., in 1875. He received his early education abroad. He returned to this country and entered Washington University, from which he was graduated in 1896. The following year he received his M. M. E. from Cornell University. For short periods he was connected with the St. Louis Water Department, the Bell Telephone Co. and Westinghouse, Church, Kerr & Co. He obtained his shop experience with the Missouri Car Railway Co. He then returned to Westinghouse, Church, Kerr & Co. where he was located for about six years in their engineering department. He resigned from this position to take over the management of the sales and construction of the New York office of the Westinghouse Machine Co. He was with this firm as manager of the New York office until 1915, when he entered business for himself in New York City. He died on June 16, 1920.

Mr. Brinsmade became a junior member of the Society in 1897 and was promoted to full membership in 1906. He also belonged to a number of social clubs in the city.



WHITFIELD P. PRESSINGER

WHITFIELD P. PRESSINGER

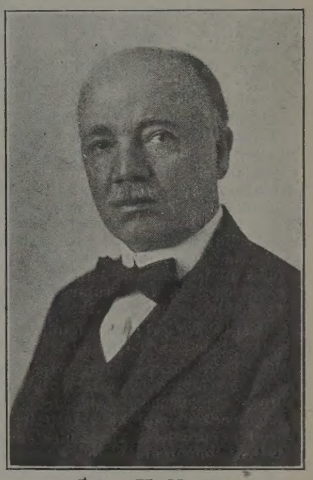
Whitfield P. Pressinger, vice-president of the Chicago Pneumatic Tool Co. and actively engaged in the pneumatic-tool and allied machinery industry for many years, died on June 10, 1920. Mr. Pressinger was born in New York City in 1871. He was general manager of the Clayton Air Compressor Co. for seven years and became widely known through his numerous activities in connection with his work in that line. He became an associate of the Society in 1903. He was also a member of the Compressed Air Society, the Sons of the Revolution, the Masonic fraternity, and belonged to a number of New York clubs.

JOHN H. NORRIS

John H. Norris, chief engineer of the National Meter Co., Brooklyn, N. Y., died on June 21, 1920. Mr. Norris was born in London, England, in 1857, and received his early education in English schools. Upon his coming to the United States he studied at Cooper Union Institute. He then served an apprenticeship with R. Hoe & Co., New York, from 1872 to 1877. For short periods directly following he worked for the firm of Beckett & McDowell, Arlington, N. J., and with the Pawtucket Manufacturing Co., Pawtucket, R. I. From 1882 to 1887 he was connected with Walter Scott & Co., Plainfield, N. J., having charge of the drawing room, including the design and equipment of a new factory. In 1887 he became associated with the National Meter Co., with which concern he was engaged until the time of his death, a period of thirty-three years. In this connection he was especially well known in the water-works field throughout the country, and was an unquestioned authority on the design and manufacture of water meters.

Mr. Norris was a particularly active member of the Society, which he joined as a junior member in 1891, receiving his full membership in 1905. He was chairman of the New York Section during 1917 and for four years served on the executive committee of the Section. He was also chairman of the excursion committee for the Annual Meeting of the Society in 1918.

Personally Mr. Norris was kindly, quiet and unassuming. Patient and thorough with the many problems of his calling; generous and genial with friends and associates, his memory will long be held in affectionate esteem by all who knew him.



JOHN H. NORRIS

LOUIS J. MONAHAN

Louis J. Monahan, president and general manager of the Universal Motor Co., died on February 3, 1920, from pneumonia following influenza. Mr. Monahan was born on August 9, 1876, in Oshkosh, Wis., and was educated in the home schools. When still very young he developed a remarkable talent for mechanics and inventions and in 1902 became associated with John D. Termaat in a number of inventions. They established the Termaat & Monahan Co. to build experimental models of gas engines. These models proved successful and the company continued under the original management until 1913, when Mr. Termaat and Mr. Monahan retired from active management. In 1914 they established the Universal Motor Company, of which concern Mr. Monahan was president at the time of his death.

Mr. Monahan became a member of the Society in 1912. He also belonged to the American Chemical Society and to the Society of Automotive Engineers.

EMPLOYMENT BULLETIN

THE SECRETARY considers it a special obligation and a pleasant duty to make the office of the Society the medium for assisting members to secure positions by putting them in touch with special opportunities for which their training and experience qualify them, and for helping any one desiring engineering services. The applications listed below combine the services of the Society and of the Engineering Societies Employment Bureau, Engineering Societies Building.

POSITIONS AVAILABLE

Stamps should be inclosed for transmittal of applications to advertisers; non-members must accompany applications with a letter of reference or introduction from a member; such reference letter will be filed with the Society's records.

INSTRUCTOR IN MECHANICAL ENGINEERING for machine drawing and simple design, elementary steam engineering, and to work into short machine shop course; assignment of work will depend upon experience. Can use graduate with at least one year engineering experience or older man who has done some teaching. Give particulars, with recent photograph. Location near York. Z-1695.

OPERATING ENGINEERS. Excellent opportunity of learning business and developing quickly into supervisory operative position of trust. Offered to 4 or 5 young engineers to enter employment of well-established company manufacturing basic commodity; good salaries from start; applicants must be willing to enter practical work and demonstrate ability to successfully handle same before securing promotion. Successful experience in handling men and production is desirable. Location New York. Z-1694.

PROFESSORSHIP in steam and gas-engine design in Eastern technical school. Subjects to be handled: steam-engine design, gas-engine design, machine design, boiler design, and truck design. Man of experience to become head of Department required. State experience, salary desired, age and training. Z-1692.

INSTRUCTORSHIP in mechanical engineering needed in technical school in N. Y. State. Subjects to be distributed throughout department. Excellent opening for one desiring to teach or to study further before entering practice. State experience, training and age. Z-1693.

MECHANICAL ENGINEER familiar with iron and steel trade, and with bread knowledge of equipment for railroads and public utilities; capable of making technical investigations and reports for executive board of organization interested in determining investment value of railroad and public-utility securities. Complete, detailed, and chronological statement of education, experience, and other qualifications. State salary expected. Z-1689.

COLLEGE GRADUATE with thorough training in physics and chemistry for routine and research work in physical and mechanical testing of metals. Give references. Z-1686.

PHYSICAL CHEMIST with large corporation, familiar with inorganic analytical methods for metallurgical research work. References required. State salary expected. Location New York. Z-1687.

EXAMINATION will be held in July and August for position of junior engineer and deck officer on field force, and of Computor (mathematician) on office force of U. S. Coast and Geodetic Survey. Fifty vacancies in field force and ten in office force. Applicant must be less than 26 years old and received degree of C. E. or B. S. in civil engineering.

After 6 months of satisfactory service positions lead to commissioned grade of aid, which ranks with second lieutenant in army or ensign in Navy. For further information write to R. L. Faris, Acting Director, Dept. of Commerce, U. S. Coast and Geodetic Survey, Washington, D. C. Z-1674.

ENGINEER to take charge of 750 h.p. power equipment (boilers and engine). Must speak Spanish. Location Cuba. Z-1683.

MASTER MECHANIC to take charge of maintenance of car equipment for New England street railway consisting of 106 miles track and operating 80 cars daily. Must have had similar work and responsibilities. Give full particulars as to experience, references, age, nationality, etc. Location Maine. Z-1684.

ENGINEERS with technical and practical training in mechanical, structural, civil and electrical engineering wanted by progressive industrial concern which operates over dozen plants with main office in Toledo, Ohio. Offer splendid opportunities to first-class men with drafting experience, as duties include both office and field work. In reply state education, experience in full, salary desired, and when available. Location Ohio. Z-1668.

FOREMAN for gray-iron foundry. 8-15 ton output. Location Scranton, Pa. Z-1647.

ENGINEER for research, experimental, testing and developing improvements of our standard lines of brushes, hardwares, novelties, etc. Applicant should have technical education as well as practical mechanical experience. Excellent opportunity for advancement. Location Cleveland. Z-1651.

ENGINEER experienced in water-supply design and construction for work in Malay Peninsula. At least one year's work. Location Orient. Z-1655.

ASSISTANT SUPERINTENDENT, technical graduate with at least two years' shop practice, for long established manufacturing company, making high grade of interchangeable work. Give age, experience, religion and salary expected. Location near New York City. Z-1631.

ASSISTANT OR ASSOCIATE PROFESSOR of steam and gas engineering. Temporary appointment for one year with possibility of being made permanent. Most of time will be spent in teaching thermodynamics but candidate who can also handle courses in commercial engineering will be preferred. Duties commence September 23. Location Wisconsin. Z-1632.

GENERAL ASSISTANT to work manager of large hat manufacturer. Young man 20-30 with practical machine-shop experience and native executive ability. Technical training desirable but not absolutely essential. Good personality, tact, and knowledge of men also required. Recent graduates will be considered. Location Brooklyn, N. Y. Z-1633.

PRODUCTION ENGINEER. Man with good technical knowledge and broad experience in up-to-date factories in quantity production; first-class mechanic, who can devise means and design small tools, dies and jigs and fixtures for producing small steel and brass parts cheaply in large quantities. One who has successfully operated an up-to-date production system. Consideration given only to letters specifying where employed last ten years, position held, name of active head of the company and salary expected. Location Michigan. Z-1637.

ENGINEERS AND DRAFTSMEN on estimating design, construction and installation of heavy and medium machine-shop and foundry work, such as largest hydraulic turbines, etc. Several desirable positions open. Location Canada. Z-1638.

PLANT SUPERINTENDENT for company manufacturing fertilizers. Must be technical graduate, preferably mechanical or chemical engineer with some experience in manufacturing work. Single man preferred. State salary, qualifications, technical training, age, and references. By letter only. Location Newton, N. J. Z-1625.

STRUCTURAL STEEL DRAFTSMAN, familiar with details of mill and office buildings. Position permanent, location Havana. Mention qualifications and salary expected in first letter. Z-1627.

ASSISTANT TO EFFICIENCY ENGINEER to be in direct charge of general testing and investigations on boilers, various types of fuel-burning furnaces and steam-using equipment. Young man with technical education and one or two years' experience in testing of steam boilers preferred. Location Ohio. Z-1606.

MECHANICAL DRAFTSMAN familiar with small mechanical structures and preferably having had some experience with buildings and their equipment. Man with taste for and ability to work into executive position preferred. Location Massachusetts. Z-1611.

SALES ENGINEER. Age 28-35. Preferably engineering graduate. Must have experience in selling to industrial plant engineers and building contractors and in dealing with architects in New York district, preferably in lines similar to valves, plumbing and heating specialities. Location New York. Z-1613.

CHIEF INDUSTRIAL ENGINEER of broad experience wanted for major position on technical staff of important analytical organization in New York City. Must be familiar with various branches of engineering, and have ability to pass judgment on scientific, technical and commercial soundness of industrial and other enterprises whose securities the analytical organization desires to consider in making investment recommendation to its clients. No attention will be paid to communications that do not contain complete, detailed chronological information relative to education, experience, and other qualifications of applicant. Men whose ability is worth less than $10,000 a year need not apply. Z-1661.

SALES ENGINEER speaking Spanish familiar with milling and reduction plant machinery, competent to give advice to possible purchasers, to recommend installations of small reduction plants, with designs of layouts. Location Chili, South America. Z-1640.

SUPERINTENDENT, A-1 man thoroughly practical and experienced in modern methods of manufacture. Require experienced tool designer thoroughly experienced in manufacture of small metal goods. Give age, experience and salary. Location Long Island City. Z-1596.

ESTIMATOR AND SALES ENGINEER for large steam-boiler manufacturer. Location Illinois. Z-1597.

RESIDENT ENGINEER to take complete charge of cotton-mill construction. Must be thoroughly familiar with building construction and design, especially brick and timber, also in installation of motor drives, shafting, etc. Familiarity with South American customs and Spanish language desirable. Should be willing to remain at least a year. Location South America. Z-1598.

INSTRUCTOR to teach either or both electrical or mechanical engineering. Prefer young man with some practical experience or who desires to come to Pacific Coast for personal reasons. Location California. Z-1599.

ENGINEERING DRAFTSMAN specially skilled in design and construction of reinforced concrete for work in oil fields of Mexico on plant reconstruction. Location near coast. Conditions good as can be in foreign country. Must be single, should have knowledge of Spanish and be familiar with outside work if possible. At present work will be designs and estimates; later will be construction. Good chance for advancement. Give full information with references in first letter. Location Mexico. Z-1600.

MECHANICAL ENGINEER; technical graduate, about 30 years of age, with 3 or 4 years actual power-plant operating experience as assistant to engineer in charge of power plants. Should possess some executive ability as work will consist of supervising power-plant operations of twelve of our works, supervising design and layout of new power-plant work and conducting investigations in use of steam, air and water in process work. Location Ohio. Z-1602.

INSTRUCTORS AND ASSISTANT PROFESSOR for mechanical engineering department of large university. Location Illinois. Z-1603.

ENGINEER experienced in designing, installing and burning pulverized fuel (coal). Experienced men only. Z-1586.

INSTRUCTOR to take charge of mechanical drawing, descriptive geometry and elementary machine-design courses. Prefer young unmarried man with some teaching experience. Location Wisconsin. Z-1592.

MASTER MECHANIC for company manufacturing food products. Location Brooklyn, N. Y. Z-1593.

MECHANICAL ENGINEER experienced in passenger and freight-elevator work. Excellent opportunities for future. Location Pacific Coast. Z-1568.

SALESMEN for financial and industrial publicity and research. Remuneration is on commission basis, but returns, due to coöperation, are greater than compensation received by sales engineer. Z-1569.

CHIEF DRAFTSMAN wanted. Experienced in machine designing and mechanical drafting to have charge of drafting room. Must be capable of supplying manufacturing department with accurate working drawings and bills of material for the manufacture of vegetable-oil machinery. Location Georgia. Z-1574.

CHECKER in drafting room of engineering department. Technically trained man, graduate of either civil or mechanical engineering, not electrical. Should have some experience in plant construction; three or four years in responsible position laying out work, checking, etc. Location Bayway, N. J. Z-1575.

CONSTRUCTION ENGINEER for installation of power plant for steel mill in Alabama. Low-pressure turbine generator plant, with pumps, pipe lines, etc. Location Alabama. Z-1576.

INSTRUCTOR to teach railroad work and surveying, recitation, field and drawing-room work. Salary is dependent upon experience. Location Pennsylvania. Z-1579.

MECHANICAL ENGINEER familiar with automatic-package and other saving machinery for installation, development and experimental work. Must not be over 40 years old. Location Illinois. Z-1559.

DESIGNER experienced in medium heavy machinery such as elevators, conveyors and crushers for company manufacturing sand-blast machinery. Practical engineer who has worked through shop with designing experience between 35 and 45 years old desired. Location Maryland. Z-1561.

LUBRICATION ENGINEER with executive ability for work in Japan. Man who has lived in Japan preferred. Location Japan. Z-1544.

SALES ENGINEERS (3 or more) preferably with experience along pneumatic tool or kindred line. Location New York City. Z-1549.

MECHANICAL ENGINEER with broad experience in machine design for position of professor in southern university. Location South. Z-1552.

PRODUCTION ENGINEER experienced in steam-heating equipment to organize and develop production of thermostatic valves. Location Pennsylvania. Z-1530.

MANAGER OF SHIPPING AND RECEIVING to take charge of operations, involving large tonnage in connection with railroad, motor-truck and marine shipments in plant covering extensive acreage. Must be thoroughly experienced and able to take entire charge of organizing, planning and carrying out work efficiently. Plant one hour's ride from New York City. Z-1531.

MECHANICAL DRAFTSMEN. Experienced for locomotive design and detail. State technical training, experience and salary. Location Philadelphia, Pa. Z-1468.

ASSISTANT PROFESSOR OF MECHANICAL ENGINEERING, technical graduate to assist in laboratory courses; to take charge of courses in high speed internal-combustion engines and automotive design, which is part of optional course in automotive engineering for seniors in mechanical engineering. Location Michigan. Z-1434.

SALES ENGINEERS. Old-established company producing special steel castings and forgings for mining, milling, quarry and contracting machinery can use several technical graduates as salesmen working for its district offices. Must have ability to sketch machine parts, knowledge of foundry methods and commercial sense. Z-1283.

YOUNG INSTRUCTOR IN MECHANICAL ENGINEERING; good opening for one who desires to go into teaching profession. Location Maryland. Z-1257.

ASSISTANT PROFESSOR OF MECHANICAL ENGINEERING desired in high-grade institution on Pacific Coast. All-around man in both class and laboratory work preferred. Position is available also for instructor in mechanical engineering who can devote his attention to drawing room work. Send complete accounts of experience and qualifications. Z-1241.

GRADUATE MECHANICAL ENGINEERS with automobile experience to work on designing in connection with motor trucks. State in detail experience, salary, etc. Location New York City. Z-1210.

SALES ENGINEER to travel. Must be familiar with valves and jobbing trade. Traveling through South or Pittsburgh. Z-1205.

MECHANICAL ENGINEERING INSTRUCTOR to have charge of machine shop and teach one course in machine-ship practice and one in junior mechanical laboratory. Must be college graduate. Engineer interested in this type of teaching desired. Location Texas. Z-1180.

MARINE ENGINEER, high-grade technical graduate. Experienced in design of all kinds of marine machinery and qualified to make complete calculations and designs of marine machinery. Opportunities for advancement are good. Salary paid commensurate with experience and ability of men selected. Location New Jersey. Z-1158.

MECHANICAL OR ELECTRICAL ENGINEERS, technical graduates or equivalent training. Permanent expansion of business presents opportunities for one or two men with broad experience and several promising men not so far advanced. Openings lead to positions of responsibility with large essential industry in Chicago. Experience along any of following lines desirable:—Planning tools, fixtures and equipment for machine or assembly operations; metal finishing; time study and rate setting; development of special processes and machinery; investigation of materials and correcting shop troubles. Work largely confined to quantity production of small intricate parts on interchangeable basis. Applicants should have some experience in manufacturing products similar to typewriters, adding machines, cash registers magnetos, meters, telephones, phonographs, clocks or sewing machines. Give full particulars about education, experience, age, etc. All applications with above qualifications will be acknowledged promptly. Z-1118-20.

MECHANICAL ENGINEER with experience in designing and selling hoisting and elevating electric and hydraulic machinery and apparatus, as well as in general jobbing work of large foundry and machine shop. Man under forty with technical education preferred. Give full details as to past and present employment, education, salary wanted, age, married or single and date services available. Z-1045.

PRESS-ROOM AND TOOL-ROOM FOREMAN. Shop making medium and small stampings in both light and heavy gage steel. Increasing shop capacity and offer good opportunity for two first-class men. Location Middlewest. Z-1041.

DESIGNING AND OPERATING ENGINEER for industrial gas plants. Must possess executive ability and be capable of heading department. Reply in detail. Location New Jersey. Z-1019.

ENGINEER to study utilization and prevention of waste material in cutting metals. Man engaged in metal stamping would have desired experience. Location New Jersey. Z-486.

ENGINEER for study of polishing methods and equipment. Should have knowledge of abrasives. Mechanical or chemical engineer would be best suited for this work. Location New Jersey. Z-487.

MEN AVAILABLE

Only members of the Society are listed in the published notices of this section. Copy for notices should be on hand by the 10th of the month preceding date of issue and should be limited to 45 words. The form of notice should be such that the initial words indicate the classification. Notices are not repeated in consecutive issues.

MECHANICAL ENGINEER, technical graduate, 33, married; 12 years' experience in design, planning, time study, bonus system, organization of new departments, and equipment for new processes, expert in accurate mass production. Desires connection progressive concern as executive. Location preferred Cleveland. SM-5395.

MARINE TECHNICAL REPRESENTATIVE, at ship and navy yards throughout country for past three years; for firm manufacturing marine equipment; desires connection with firm manufacturing marine engineering apparatus, as district representative. Will go anywhere and travel if necessary. Technical graduate, twenty-eight years of age. SM-5396.

EXECUTIVE MECHANICAL OR SALES ENGINEER. Aged 29. Technical graduate and 12 years' experience in manufacturing. Engineering, production, and inspection of heavy machinery. Especially familiar with locomotive design and manufacture. As army ordnance Captain had under immediate direction approximately 1,000 officers and civilians representing practically all trades and professions. At present doing sales and engineering work in executive capacity. Desire position paying minimum salary of $4,500, offering an opportunity. SM-5397.

MECHANICAL ENGINEER, Purdue graduate; three years' experience highway construction, four years with internal-combustion engines, including high-compression engines of the Hvid type. At present employed in experimental work. Prefer Middle West. Available October 1. SM-5398.

MANAGER FOR SOUTH AMERICAN COUNTRIES, American engineer, technical education, married, several years' experience in Brazil as general manager of large American interests. Know country and speak Portuguese fluently. Connection with American firm desired as manager, general representative or special investigator. Successful executive. Extensive experience in industrial engineering, cost accounting, standardization, purchasing and manufacturing. Was also in American Consular Service. SM-5399.

EXECUTIVE ASSISTANT to general manager or chief engineer of manufacturing concern, holding company or public utility. Experience, two years teaching, three years construction work; three years consulting engineering work for federal and state governments. Can assemble corps of engineers familiar with the Polish, Russian, German and French languages on reasonable notice. Member A. S. M.E. and A.I.E.E. Salary $4,500 to $5,000. SM-5400.

MECHANICAL ENGINEER, graduate 1919. One year drafting-room work, including truck design and tool designing. Also practical machinist. At present employed but desirous of moving to West. Would like to locate in Washington, Oregon or Idaho. Available September 1, if given month's notice. SM-5401.

MECHANICAL ENGINEER, technical graduate; 15 years' experience in operation, testing and design of power plants; open for position with steel company or industrial concern or as superintendent of power or steam engineer. Can furnish best of references. SM-5402.

GENERAL MANAGER. Technically educated. Proven executive and organizer with long successful record in prominent corporation; 20 years' experience in engineering, production and commercial branches of industry. Several years abroad. Can satisfy as to native judgment, tact, and qualifications for management of manufacturing company. Desire connection with progressive company which may lead to interest in business. SM-5403.

MECHANICAL ENGINEER, 25; graduate M.I.T. specialized in steam and combustion engineering, at present in charge of efficiency of stationary power plants totaling 20,000 b.h.p. of large western railroad, desires position offering better opportunities for advancement. Good record, and references. Would consider position with firm of consulting or construction steam engineers, or as steam engineer of manufacturing concern. Opportunity for advancement rather than initial salary chief consideration. SM-5404.

INDUSTRIAL EXECUTIVE with four years' successful record as shop superintendent and production engineer in plant of 3,000 men desires position with good future. Aged 29, graduate mechanical engineer. SM-5405.

PLANT ENGINEER AND MANUFACTURING EXECUTIVE; technical graduate; 15 years' general engineering and contracting experience. At present in entire charge of all construction and maintenance for large tool-manufacturing concern. Thoroughly conversant with shipyard management and vessel repairing. Used to assuming large responsibilities along these and similar lines. Would act as manufacturers' agent. Open for engagement shortly. SM-5406.

CHIEF ENGINEER, head of engineering department, is open for engagement in similar capacity. Good executive and organizer with ability to get results. Wide experience with big concerns. SM-5407.

MECHANICAL ENGINEER; college trained with four years' experience in production-works engineering, machine-tool sales. Desire connection with manufacturer in engineering sales or purchasing work. SM-5408.

CHIEF DRAFTSMAN OR ASSISTANT ENGINEER. Technical graduate in mechanical and civil engineering. Age 31, married. Eight years' experience as detailer, layer-out, checker, chief draftsman and mechanical engineer. Power plants and units, electrical locomotives, electric traveling cranes, airplane equipment and instruments of precision. Not production or industrial expert but high-grade mechanical engineer qualified to supervise designing and drafting departments. SM-5409.

MANUFACTURING EXECUTIVE, wide experience in all lines, desires connection with large enterprise. Minimum salary $5,000. SM-5410.

MANUFACTURING EXECUTIVE; American; 36; ten years' experience in manufacture and finishing of light and heavy-metal stampings. Familiar modern production methods and installation of piece-work and bonus systems. Successful handling of labor. Minimum salary $6,000. SM-5411.

PROFESSOR MECHANICAL ENGINEERING who resigned college appointment to take up engineering for navy during war and who has only recently been released from that duty, seeks connection with first-class university. Best college and engineering references. SM-5412.

EXECUTIVE graduate mechanical and electrical engineer (1911). Broad electrical and mechanical experience, shop work, production and cost accounting. Thoroughly familiar with modern production methods, accounting and scientific management. Ex-army officer. Age 32. Would consider sales. Salary of secondary consideration to opportunity. SM-5413.

EQUIPMENT ENGINEER familiar with manufacture of interchangeable parts, gage design, placing of tolerances, etc., on product similar to fire arms, cash registers, typewriters, etc. Position desired in central New York. SM-5414.

MECHANICAL ENGINEER, 28, married; four years varied experience with large plant manufacturing cotton-seed products. Two years as officer, engineer U. S. A. Desires position with industrial concern, where energy and ambition counts. At present employed. SM-5415.

MECHANICAL ENGINEER, designer, executive, expert on intricate mechanisms, such as adding and calculating machines, labor-saving devices, etc. Also shop tools, and tooling methods, production systems, etc. Am at present in charge of designers. Age 38, available immediately. Location vicinity New York City. Salary $3,500. SM-5416.

SALES ENGINEER, technical graduate, age 23, at present so employed. Seeks bigger opportunity, preferably with firm manufacturing some power-plant specialty. Location New York City or vicinity. Salary $175. SM-5417.

CHIEF OR ASSISTANT CHIEF ENGINEER; 12 years' experience in design and testing of pumping machinery in several of larger plants. Know all phases of business. At present chief engineer but would consider position as assistant in large organization. Age 33, married. SM-5418.

SALES ENGINEER; 35; 10 years' experience in engineering. Also manager Philadelphia territory for Western concern for three years. Desires new connection with good live firm to cover mill and factory trade. SM-5419.

ASSISTANT SUPERINTENDENT. Technical degree 1914. Experienced as assistant construction engineer large power plant. Practical blast furnace experience as fireman large steel plant. Minimum salary $5,000. Age 28, married, references. SM-5420.

MECHANICAL ENGINEER. Technical graduate, desires position in engineering or research department. Two years' experimental work along mechanical lines involving some machine design. Two years' office work in sales department of manufacturing company and one year marine engineering. Salary $2,400. SM-5421.

MECHANICAL AND STRUCTURAL DRAFTSMAN, designer or chief draftsman, technical graduate, six years' practical experience, unmarried, at present employed. Desire location in New York City or vicinity, salary $2,100. Had experience as chief draftsman. SM-5422.

MECHANICAL AND ELECTRICAL ENGINEER. Technical graduate, desires position with consulting engineering firm, or firm anticipating extensions in power system. Thoroughly familiar with steam power-plant lay-out, design and construction. Age 24, single. Salary commensurate with responsibility. SM-5423.

ASSISTANT PROFESSOR of mechanical engineering, with large and varied experience, mainly in machine design and steam engineering; including about two years. Location preferred within 500 miles of New York City. SM-5424.

MECHANICAL ENGINEER. Technical training; 30 years old; married; 10 years' experience on hoisting, conveying, power transmission and coal-handling apparatus, desires permanent connection with reliable and progressive firm as assistant to chief engineer, executive, or in other responsible capacity. SM-5425.

ENGINEERING EXECUTIVE OR GENERAL MANAGER, 37, technical graduate. Ten years as engineer and manager with concern manufacturing engines, turbines and fabricating pipe; one year mechanical partner in architectural office; two and a half years in France, where erected and had complete charge of large army automobile-repair shop. Salary $7,500. Location New York City or vicinity. SM-5426.

MECHANICAL ENGINEER, technical graduate, married, desires to locate permanently as plant engineer or in executive position of similar character. Five years' experience on plant construction and layout; efficiency engineering; machine design; power-house design; operation and installation. Capable of handling new design as well as maintenance work of general character. SM-5427.

SUPERINTENDENT OR WORKS MANAGER; 25 years of technical and practical experience in manufacturing of interchangeable parts in all branches. Competent executive; capable organizer, thoroughly familiar with modern mechanical engineering and production methods; age 46. SM-5428.

TECHNICAL GRADUATE in mechanical engineering, 28, single; three years' automatic machine designing and one year assistant mechanical engineer of large manufacturing concern, desires responsible position with progressive concern. SM-5429.

GENERAL MANAGER, American, 35, broad successful experience construction, organization and effective operation of wide range of industrial plants under practical scientific management methods. Desire permanent connection with progressive concern having difficult production problem or extensive development program. Position must be one having outlet for initiative and one where ability and hard work will be recognized by opportunity to grow in organization. Available immediately. SM-5430.

MECHANICAL ENGINEER, technical college graduate, 33; six years in designing and engineering, punching and shearing machinery, boiler and structural shop machinery. Present employment covers five years. Desire to become associated with firm of consulting or industrial engineers. Chicago and vicinity preferred. SM-5431.

CHIEF ENGINEER, head of engineering department, is open for engagement in similar capacity. Good executive and organizer with ability to get results. Wide experience with large concerns. SM-5432.

MECHANICAL ENGINEER, 37. Fifteen years' experience covering broad field in mechanical lines. Specialized for seven years in heating and ventilating. Past few years devoted to power studies for industrial plants. Desire responsible position with possibilities, preferably Detroit or vicinity. SM-5433.

DESIGNER AND EXECUTIVE desires position growing concern with opportunity to develop into high-grade executive. Eleven years' experience in tool and machine design and minor executive positions in manufacture of typewriters, guns, automobiles and machine tools. Least salary considered $3,000. SM-5434.

INDUSTRIAL PLANT ENGINEER with 16 years' experience as draftsman, chief draftsman, assistant construction engineer on general industrial plants, steel, forging and mining, etc. At present employed. Desires change of executive nature. Pleased to furnish full particulars as to experience and reference. SM-5435.

TECHNICAL GRADUATE, 28, married, five years' experience, desires position with manufacturing concern. Energetic, conscientious, ambitious worker. Talks several languages. Has worked in foreign countries, U. S. and Canada. Will give more consideration to opportunity for experience and advancement than to initial salary. SM-5436.

MECHANICAL ENGINEER. Member A.S.M.E., technically educated and trained, over 20 years' experience in consulting, constructing and executive capacities in various branches of engineering work. Recently released, three years in U. S. Air Service with rank of Major, experienced in internal-combustion engines and airplane construction. Desires responsible position with reliable concern. Preferably on Pacific Coast but location immaterial if position satisfactory. SM-5437.

MECHANICAL ENGINEER with 20 years' manufacturing experience, desires new connection as general or factory manager with progressive enterprising concern, having possibilities for future expansion. Past experience as general manager, factory manager, superintendent and chief engineer has been acquired in manufacture of airplanes, automobiles, trucks, gas engines, tools and special equipment. Thoroughly familiar with accurate interchangeable production in above lines, and up to date on cost accounting. Member A.S.M.E. 41, married. Can show successful record. Best of references as to executive ability and character. SM-5438.

WORKS OR PRODUCTION MANAGER, 15 years' broad, practical experience in manufacturing production control, engineering, purchasing and cost accounting; gasoline engine, metal and wood-working lines; able executive and organizer with initiative; technical graduate; aged 37; married. At present employed by large corporation. SM-5439.

MECHANICAL ENGINEER, 30, married; six years' experience on design of tools and special machinery. Four years' experience as process engineer, chief draftsman and assistant chief engineer. At present in charge of engineering department in Boston, on experimental work. Any location, but prefer East. Excellent references. SM-5440.

MECHANICAL ENGINEER, 30, married; having purchasing and general manufacturing experience with large electrical manufacturer, desires engagement vicinity New York. Well acquainted New York market. Would consider entering foreign field as representative. Working knowledge. French, Spanish and German. SM-5441.

EXECUTIVE ENGINEER, mechanical and structural, 17 years' experience, American, 36, married. Broad experience industrial-building design and equipment design and installation. Expert in piping layouts. Special chemical plant experience. Thoroughly familiar with gage work and interchangeability, quantity production, tool design, general mechanics; salary $5,200-6,000. SM-5442.

MECHANICAL ENGINEER desires position with consulting engineer. Five years' machine-shop work, three years' plant engineer, one year design. Graduate of M. I. T. Married, 31 years of age; available September 1. Salary $4,000. SM-5443.

EXECUTIVE ENGINEER, age 33, eleven years' manufacturing and business experience in iron and steel products and sales, desires connection in New York district. Possesses character and personality required to meet men of high standing. Qualified to handle financial and administrative work. Under suitable conditions would be willing to acquire interest in going engineering or manufacturing organization capable of growth and development. SM-5444.

SPECIALIST IN TRANSFERENCE ENGINEERING, member, wants to arrange with organization having ample facilities for manufacture and sale of recently patented appliance for which there is a ready and profitable market. Services optional. SM-5445.

MECHANICAL ENGINEER, technical education, age 24, with five years' practical experience covering machine-design, power-transmission and plant-maintenance engineering. Energy, initiative and personality. Desires position as assistant engineer on industrial work or with responsible engineering concern. Location New York City or vicinity preferred. Salary $2,400. SM-5446.

WORKS OR PLANT ENGINEER, chief engineer or chief draftsman. Experience covers installation and construction, design of medium to heavy machinery, and shop work. In responsible charge of work and men for number of years. Age 37. SM-5447.

SUPERINTENDENT OR MANAGER, technically-trained engineer in addition to being practical mechanic, with 20 years' varied experience in essential and special branches; exceptional ability for getting best results from men and equipment, develop methods and processes for quality, quantity and low cost in established concern or working out new enterprises. Principals only. SM-5448.

INDUSTRIAL ENGINEER, mechanical rubber, age 28, married, M.I.T. One year electrician, machinist, machine designer; two years as mechanical engineer on maintenance and new designs; two years as industrial engineer on time study, analysis and improvement of process, factory layouts, standardization, costs, organizations. New England. SM-5450.

INDUSTRIAL ENGINEER, technical graduate, age 31, with eight years' practical experience, design and layout of power plants, industrial plants, heavy machinery, etc.; also time studies, planning, scheduling and routing production, cost accounting, stores control, etc., with present firm three years; good reason for desiring change, would consider position as sales engineer at present located in New York City. SM-5451.

MARINE AND MECHANICAL ENGINEER, experienced in construction, installation, operation and maintenance of marine boilers and machinery, with knowledge of power-plant and mining machinery. Two years chief inspector of machinery Emergency Fleet Corporation; member A.S.M.E. Soc. Naval Arch. and Marine Engineers, Assoc. Soc. Naval Engineers. Age 34, married; no travelling, but will locate any place. SM-5452.

MECHANICAL ENGINEER avaiable. College graduate, 31 years old. Five years' experience with large railroad on production, research work, railroad equipment; two years' experience with Engineer Corps in production branch; desires to locate with firm where engineering experience can be used in business offering bright future. SM-5453.

ENGINEER, graduate mechanical, three years marine engineer, three years technical work, etc. Philadelphia or vicinity; 30 years old. SM-5454.

FACTORY MANAGER OR SUPERINTENDENT with 18 years' active manufacturing experience from bench hand to manager. Thoroughly conversant with modern factory methods, as, organization, management, production, costs employment and traffic. Especially fitted for organizing and developing new industry or in building up existing organization that is not showing satisfactory results. Now employed as works manager of plant organized developed from its conception. Can arrange to be available not later than October 1. Age 39, and in perfect health. SM-5455.

ASSISTANT TO BUSY EXECUTIVE, technical graduate, age 28, single; two years' machine shop; two years' mill engineering and management; two years Army Ordnance officer; one year machine design and development; desires to make new connection presenting real opportunities for development. SM-5456.

ENGINEER with 12 years' varied experience in operation management and sales is open for engagement. SM-5457.

MANAGER, age 35, having unusually broad experience, both here and abroad covering both mechanical and civil engineering, graduate in law and engineering, for four years full charge of machinery company, available shortly. Prefer permanent connection with small company capable of large expansion. SM-5458.

ELECTRICAL ENGINEER, age 29 years. Six years' experience in electrical and mechanical fields as production and sales engineer and as assistant to consultant engineer. Desires permanent connection as assistant to chief engineer of company manufacturing mechanical or electrical devices. SM-5459.

MANAGER—FACTORY OR EXPORT; Graduate electrical engineer, Assoc. Mem. A. S. M. E.; married; 10 years superintendent and part owner of factory in Eastern Pa.; more than 3 years' experience in special purchasing, initiating business, shipping, and following up of production for one of largest export and import houses in America. In this connection traveled and did business extensively in Far East, including Eastern Siberia, Manchuria, China and Japan. Have successfully handled men. Desire position with responsible manufacturing or exporting concern. Location immaterial. SM-5460.

CANDIDATES FOR MEMBERSHIP

TO BE VOTED ON AFTER AUG. 17, 1920

BELOW is a list of candidates who have filed applications since the date of the last issue of MECHANICAL ENGINEERING. These are arranged geographically. Applications for change of grading are also posted. The total number of applications received and listed below is 200.

The Membership Committee, and in turn the Council, urge the members to scrutinize this list with care and advise the Secretary promptly of any objections to the candidates posted. All correspondence in this regard is strictly confidential. Unless objection is made to any of the candidates by Aug. 17, 1920, and provided satisfactory replies have been received from the required number of references, they will be balloted upon by the Council.

NEW APPLICATIONS

Alabama

DAVIS, CHARLES C., Construction Superintendent, American Cast Iron Pipe Co., Birmingham

Arizona

SCHUETTLER, EDMUND H., Mechanical Designer, Inspiration Consolidated Copper Co., Inspiration

California

BUZZO, JOSEPH T., Draftsman, California & Hawaiian Sugar Refining Co., Crockett
HACK, GEORGE D., Draftsman, California & Hawaiian Sugar Refining Co., Crockett

Connecticut

ALVORD, ROBERT W., Assistant in Charge of Estimating, Pratt & Cady Co., Inc., Hartford
BULLARD, STANLEY H., Vice President, Bullard Machine Tool Co., Bridgeport
CRAMPTON, DONALD K., Metallurgist, Chase Metal Works, Waterbury
COLDWELL, EVERETT S., Mechanical Engineer, Columbia Graphophone Manufacturing Co., Bridgeport
CROSBY, RALPH J. Mechanical Engineer, The Asa A. Cook Co., Hartford
HUBBARD, LOUIS DEK., Vice President, Sidney Blumenthal & Co., Inc., Shelton
MARSH, ARTHUR L., Patent Attorney, Singer Manufacturing Co., Bridgeport
MCMEEKIN, BOWMAN M., Plant Engineer, Sidney Blumenthal & Co., Inc., Shelton
ROBSON, JOHN, Chief Engineer, Waterbury Tool Co., Waterbury
STETSON, GEORGE A., Assistant Professor Mechanical Engineering, Yale University, New Haven

Delaware

LAROSCH, JOHN P., Chief Draftsman, Edge Moor Iron Co., Edge Moor

District of Columbia

ABBOT, LOUIS A., Captain, Artillery Division, Ordnance Department, War Department, Washington
BALLOU, WILLARD A., Education Expert, Army Vocational Training School, U. S. Army, Washington
HOUSTON, PAUL L., Assistant Physicist and Assistant Chief of Paper Section, U. S. Bureau of Standards, Washington

Florida

ELLIS, EBENEZER D., Manager and Treasurer, Florida Ice & Power Co., Lake Wales

Georgia

MAGRAW, LESTER A., Treasurer and General Manager, Macon Railway & Light Co., Macon

Illinois

BAYLESS, HARRY C., Consulting Engineer, Chicago
BROWN, LOUIS P., Chief Inspector, Oxweld Acetylene Co., Chicago
GROSS, DEWITT C., Structural Engineer and Designer, Armour Grain Co., Chicago
HALL, LEE, Member of Staff, Griffenhagen & Associates, Ltd., Chicago
HENDRICKSON, GEORGE S., Sales Engineer, Republic Flow Meters Co., Chicago
LARDNER, JAMES F., JR., Mechanical Engineer, John Deere Plow Works, Moline
MCAULEY, BENJAMIN F., Sales Engineer, Republic Flow Meter Co., Chicago
MCDONALD, JAMES E., Chief Engineer, The Edward Valve & Manufacturing Co., Chicago
WHITE, RAYMOND E., Production Engineer, The Page Co., Chicago

Indiana

MURRAY, GILBERT H., Factory Manager, Midwest Engine Co., Anderson
SMECKEL, ERIC F., Assistant Chief Engineer, Edward Valve & Manufacturing Co., East Chicago

Iowa

CROSTHWAIT, DAVID N., JR., Research Engineer, C. A. Dunham Co., Marshalltown

Kansas

SCALLY, ROBERT A., Engineer, Empire Gas & Fuel Co., El Dorado

Louisiana

BOND, WILLIAM H., Mechanical Engineer, The Foundation Co., New Orleans
HAMMETT, GEORGE R., Sales Engineer, A. M. Lockett Co., Ltd., New Orleans
RAYNER, LESTER H., Manager and Chief Engineer, John H. Murphy Iron Works, New Orleans
TRICHE, ANDREW, JR., Assistant Engineer, St. Gabriel Sugar Co., St. Gabriel

Maryland

SENNER, ARTHUR H., Mechanical Laboratorian, N. S. Naval Experimental Station, U. S. Naval Academy, Annapolis

Massachusetts

ACKERMAN, GUY O., JR., Equipment Engineer, Royal Worcester Corset Co., Worcester
ALLEN, HAROLD A., Manager, Burmus Paper Co., Inc., West Dudley
BRADLEY, FRANK L., Designer, Lockwood, Greene Co., Boston
BROWN, GEORGE I., Student, Massachusetts Institute of Technology, Cambridge
CATE, MALCOM S., Machine Designer, Hood Rubber Co., Watertown
CHRISTMAS, JOHN K., First Lieutenant, Coast Artillery Corps, Regular Army, Boston
COONS, WILLIAM E., JR., Chief Inspector, Gilbert & Barker Manufacturing Co., Springfield
DENLEY, ALFRED N,, Mechanical & Industrial Engineering, C. T. Main, Boston
DES NARAIS, GEORGE F., Boston
DEWEY, WILLIAM F., Mechanical Engineer, B. D. Rising Paper Co., Housatonic
FORREST, WILLIAM H,, Factory Manager, Motor Specialties Co., Waltham
HALL, MALCOM B., Chief Engineer, The Foxboro Co., Inc., Foxboro
HUNTER, WILLIAM, Designer, Norton Co., Worcester
JONES, ROBERT M., Mechanical Draftsman, Saco-Lowell Shops, Newton, Uuper Falls
MERRITT, RALPH N. S., Laboratory Assistant, Nordyke & Marmon Co., Worcester
PRESBY, LEROY Q., Superintendent, American Stay Co., East Boston
PRIEST, WALTER F., Draftsman, Ashton Valve Co., Cambridge
THORUP, SIDNEY E., Power Plant Designer, C. T. Main, Boston
WELLS, ARTHUR K., Resident Engineer, The Thompson Lichtner Co., Boston

Michigan

ALDRICH, CLARENCE E., Division Superintendent of Erection, Diamond Power Specialty Co., Detroit
FELIX, FRANK C., Chief Draftsman, Timken-Detroit Axle Co., Detroit
GOODELL, RALPH A., Fire Insurance Engineer, Dyer-Jenison Barry Co., Lansing
HEISTERMAN, GEORGE C., Assistant Production Manager, Lansing Forge Co., Lansing
KIRBY, EDWARD R., Sales Engineer, The Hale-Stephan Co., Detroit
WITCHGER, EUGENE J., Chief Engineer, The Lufkin Rule Co., Saginaw

Minnesota

SMITH, LLOYD L., Sales Manager, Under-Feed Stocker Co., of America, Minneapolis

Missouri

DEAN, EDWARD, General Superintendent, Century Electric Co., St. Louis
LANGSDORF, ALEXANDER S., Industrial Engineer, Crunden Martin Manufacturing Co., St. Louis

Montana

JUNGHANNS, ERNEST L., Design Engineer, Anaconda Copper Mining Co., Anaconda

New Jersey

AYERS, FRED W., General Superintendent, Klaxon Co., Newark
BOGUSZ, WALTER J., Assistant to Experimental Engineer, Klaxon Co., Newark
BOYNTON, EARL S., Chief Engineer and Production Manager, Slocum, Avram & Slocum Laboratories, Newark
GORMLEY, JOSEPH E., Chief Draftsman and Estimator, Crucible Steel Co. of America, Harrison
HENDERSON, GEORGE A., Plant Superintendent, U. S. Arsenal, Picatinney, Dover
JENSEN, MARTEN, Assistant to Power and Safety Engineer, U. S. Rubber Co., Passaic
JOHNSON, WILLIAM H., Gas Engineer, General Motors Corp., Harrison
KNUDSON, LOUIS R., Assistant Service Engineer, T. A. Edison, Inc., Orange
NAFTALI, ISADORE, Tool Designer, Willys Corporation, Elizabeth
ROBINSON, HUGH A., General Superintendent, Aeromarine Plane & Motor Co., Keyport
VAN VALKENBURGH, HOWARD B., Chief Engineer, L. O. Koven & Bro., Jersey City

New Mexico

WEBER, RALF E., Special Apprentice, A., T. & S. F. Ry., Albuquerque

New York

AIZMAN, FRANCIS M., Department Head, Automatic Straight Air Brake Co., New York
ANDERSON, FRANK T., Division Engineer, Westinghouse Kamp Co., Brooklyn
AUER, JOSEPH L., Foreman of Machine Shop, De La Vergne Machine Co., New York
AUSTIN, CHARLES G., H. W. Johns-Manville Co., New York
BANINGER, JOHN H., Assistant Engineer, Gurney Ball Bearing Co., Jamestown
BEADLE, ROBERT C., Managing Editor, Combustion Engineering Corp., New York
BENFORD, DAVID M., Vice President and General Manager, Benford Auto Products, Inc., Mount Vernon
BOLGER, ROBERT S., Sales Engineer, International Meter Co., New York
CARLSON, HARRY, General Manager, American Galco, Inc., New York
CHRISTIANSEN, GEORGE, Draftsman, Watervliet Arsenal, Watervliet
CONNORS, WILLIAM B., Supervising Engineer, C. E. Knoeppel & Co., Inc., New York
ECKLER, ELMER E., Industrial Engineer, H. L. Gantt Estate, New York
ELDER, JOHN E., Chief Engineer, Hotel Pennsylvania, New York
FINCH, RAYMOND J., Calculating Engineer, American Locomotive Co., Schenectady
FROESCH, CHARLES, Chief Engineer, S. W. Merritt Co., New York
GARBARK, NATHANIEL M., Head Draftsman and Engineer, Otis Elevator Co., New York
HARVEY, THERON F., Materials Inspector, New York, New Haven & Hartford R. R., Schenectady
HAUSHEER, EMIL M., Chief Engineer, Mica Insulator Co., Schenectady
HEIBEL, WALTER E., Eastern District Manager, Wilmarth & Morman Co., New York

HISS, GEORGE C., Experimental Engineer, Walter Kidde & Co., Inc., New York
HOUCK, WALTER V., Vice President and General Manager, O'Neil Iron Works, Buffalo
HULIHAN, JOHN W., Sales Agent, The Wickes Boiler Co., New York
JAFFE, HARRY A., Assistant Superintendent, Steam Division, Westinghouse Electric & Mfg. Co., New York
KELTING, CLARENCE A., N. Y. Edison Co., New York
KUTSCHER, LOUIS F., Draughtsman, The Foundation Co., New York
LINKER, JOHN I., Marine Engineer & Boiler Draftsman, Newburgh Shipyards, Inc., Newburgh
McDERMOTT, JAMES, Assistant Superintendent, Morse Dry Dock Co., Brooklyn
MELLEN, WINTHROP W., Chief Engineer, Atlantic Gulf Oil Corp., New York
MILLER, WILLIAM A., Draftsman, U. S. Hame Co., Buffalo
PALMER, HENRY O., Vice-President and General Manager, Empire Gas & Electric Co., Geneva
PARIS, JAMES, Exporter and Partner, Commercial Engineering Co., New York
PARK, ROBERT E., JR., Sales Engineer, Weber Subterranean Pump Co., New York
PEYSER, JOSEPH, President and General Manager, Peyser Hansen Machine Co., Mount Vernon
PLACE, LOUIS V. JR., Czarnikow-Rionda Co., New York
PORTER, HARRY W., Manager Insulation Department, H. W. Johns Manville Co., New York
RUBIN, ROBERT, Assistant Engineer, Otis Elevator Co., New York
SAUNDERS, ALBERT, Head of Engineering Department, Zinsser & Co., Hastings-on-Hudson
SCHWEIZER, CHARLES L., Draftsman, West India Sugar Finance Co., New York
STERN, BENJAMIN J., Tool Designer, Service Engineering Co., Inc., New York
STRACHAN, JOHN, Manager, Marine Department, International Products Co., New York
SWENSON, FRANK J., Sales Engineers, Alberger Pump & Condenser Co., New York
TICE, HAROLD H., Efficiency Engineer, The Emerson Engineers, New York
TROST, PAUL A., Foreman, Geo. F. Hardy, New York
WALTERS, VINCENT, Experimentalist and Model Maker, Peirce Accounting Machine Co., Inc., New York
WALTHER, PAUL H., President, American Chimney Corp., New York
WELLS, WARREN M., Fire Prevention Engineer, Pacific Fire Insurance Co., New York

Ohio

CARROLL, WILLIAM M., President, The Carroll Engineering Co., Dayton
COLLINS, GEORGE A., Engineer, Shields Cutter Co., Cleveland
DAY, GEORGE E., Engineer, Wellman Seaver Morgan Co., Cleveland
DETRAZ, EDWARDS W., Testing Engineer, Cincinnati Milling Machine Co., Cincinnati
FABE, ISADORE, Tool Designer, Cincinnati Milling Machine Co., Cincinnati
FASSETT, FRANCIS H., Designer, F. K. Fassett, Dayton
HOBSTETTER, NORMAN A., Salesman, J. C. Lathrop, Cincinnati
HOWELL, JOHN H., Assistant Mechanical Engineer, National Cash Register Co., Dayton
KELLOGG, ROBERT H., Assistant Plant Engineer, Proctor & Gamble Co., Ivorydale, Cincinnati
MASTENBROOK, H. J., Consulting Engineer, The Ohio Blower Co., Cleveland
MILLER, WILLIAM R., Mechanical Draftsman, Hooven-Owens-Rentschler Co., Hamilton
MORGAN, ALEXANDER W., General Superintendent, Lorain County Electric Co., Elyria
NAVILLE, CONSTANTIN, Engineer, Hooven-Owens-Rentschler Co., Hamilton
PETTIBONE, CHARLES E., Director of Safety and Welfare, Pickands-Mather Co., Lakewood
PROBST, GEORGE H., Mechanical Engineer, Smith Gas Engineering Co., Dayton.
ROE, WALTER H., Mechanical Consulting Engineer, Tiffin
SCHIRMER, JAMES O., President, The Schirmer Co., Cleveland
SEYLER, GEORGE A., Works Manager, The Lunkenheimer Co., Cincinnati
STEPHEN, WALTER G., Vice President, The Hale-Stephen Co., Cleveland
WARDWELL, STANLEY H., Vice President and Production Manager, Wardwell Manufacturing Co., Cleveland

Oklahoma

WYANT, LYNTON D., District Sales Manager, Harvey Crude Oil Co., Tulsa

Oregon

OEHMEN, ERNEST L., President, Northwest Engineering Corp., Portland

Pennsylvania

DE HUFF, HENRY, Vice President D'Olier Centrifugal Pump & Machine Co., Philadelphia
FONDA, GEORGE T., General Supervisor, Bethlehem Steel Co., Bethlehem
GIBBS, ALFRED W., Chief Mechanical Engineer, Pennsylvania System, Philadelphia
GOETZ, HAROLD E., Draftsman, Skinner Engine Co., Erie
HAGAMAN, W. CHADWICK, Draftsman, Bethlehem Steel Co., Bethlehem
IBACH, EMIL, Tool Engineer, Bethlehem Steel Co., Bethlehem
KILLE, GILDON E., Sales Engineer, Green Fuel Economizer Co., Philadelphia
LINDSLEY, ALLEN M., Engineer, Alvord Reamer & Tool Co., Millersburg
LONG, DAVID R., Chief Engineer, Armstrong Cork Co., Lancaster
PARK, STARK O., Mechanical and Structural Draftsman, American Steel & Wire Co., Braddock
SPELLER, FRANK N., Metallurgical Engineer, National Tube Co., Pittsburgh
TODD, WILLIAM A., Works Engineer, Treadwell Engineering Co., Easton

Rhode Island

HIDDEN, CHARLES P., Patent Lawyer, Providence
INGALLS, ELROY D., Engineer, Cameron & Ingalls Engineering Co., Inc. Providence

South Carolina

GAYLE, WALTER W., Manager, Saco-Lowell Shops, Greenville

Tennessee

HIDDLESON, WILLIAM A., General Manager, Bristol Gas & Electric Co., Bristol
STEPPENSON, THOMAS I., Knoxville

Texas

GOGGINS, EUGENE F., Engineer, Lucey Manufacturing Co., Houston

Virginia

MURRAY, ROBERT H., Plant Manager, Tubize Artificial Silk Co. of America, Hopewell

Wisconsin

ALLEN, ERNEST C., Designer, Allis Chalmers Manufacturing Co., Milwaukee
ANDEREGG, R. H., Chief Draftsman, The Trane Co., La Crosse
BROWN, CARL G., Construction Engineer, Allis-Chalmers Manufacturing Co., West Allis
CANDEE, ALLAN H., Mechanical Engineer, The Falk Co., Milwaukee
DOWNEY, FRANK E., Vice President & Assistant Manager, Downey Heating & Supply Co., Milwaukee
HUBBARD, ALGERNON L., Jr., Estimator, Allis-Chalmers Manufacturing Co., Milwaukee
KLEIN, EDWARD E., Draftsman, Milwaukee Coke & Gas Co., Milwaukee
OCKERLANDER, HARRY R., Mechanical Engineer, The Filer & Stowell Co., Milwaukee
STUDLEY, EARL D., Draftsman, Milwaukee Coke & Gas Co., Milwaukee
WILKES, FREDERICK C. D., Manager, Luce Sugar Cane Harvester Co., Watertown

Canada

KERR, JOHN A., Development Engineer, Dominion Tire Factory, Kitchener, Ontario
MONK, MARVIN E., Sales Manager & Engineer, Herbert Morris Crane & Hoist Co., Ltd., Niagara Falls, Ontario
SWIFT, FRANK H., Resident Engineer, Powell River Co., Ltd., Powell River, B. C.

Cuba

PARKINSON, GEORGE V., Chief Electrical Engineer, Cuba Cane Sugar Corp., Havana

India

THORPE, WILLIAM A. C., District Locomotive Superintendent, Indian State Railways, Bombay

CHANGE OF GRADING

PROMOTION FROM ASSOCIATE

Pennsylvania

MERRILL, JOSIAH L., Senior Engineer, U. S. S. Shipping Board, Emergency Fleet Corp., (Reinstatement), Philadelphia

PROMOTION FROM ASSOCIATE-MEMBER

Arizona

BUCHEN, JOSEPH C., Mechanical Engineer, Miami Copper Co., Miami

California

BURTON, SYLVESTER E., Sales Engineer, American Pump Co., Los Angeles

Massachusetts

KEABLES, AUSTIN D., Mechanical Engineer, John A. Stevens, Lowell

Michigan

GRASSBY, GEORGE A., JR., Mechanical Engineer, Lockwood, Greene & Co., Detroit

Missouri

SCHAUM, ARTHUR H., Office Manager, Heine Safety Boiler Co., St. Louis

New York

MACDONALD, C. F., Engineer & Ship Surveyor, Lloyds Register of Shipping, New York
STRATTON, DAVID V., President, D. V. Stratton, Inc., New York
TAYLOR, DEWITT MCC., Associate Editor, Power, McGraw-Hill Co., Inc., New York

PROMOTION FROM JUNIOR

California

BULLEN, ARTHUR C., General Engineer, Holly Sugar Corp., Huntington Beach.

District of Columbia

MASSEY, MARK F., Chief Draftsman, Ammunition Division, Ordnance Officer, War Department, Washington

Indiana

SANDMAN, WILLIAM F., General Manager, Natco Engineering Co., Indianapolis

Missouri

STEPHENS, ROBERT R., Sales Engineer, Colcord-Wright Machinery & Supply Co., St. Louis

New Jersey

SMITH, HARRY R., Mechanical Engineer, Hyatt Bearings Division, General Motors Corp., Harrison

Ohio

JARRETT, HILLARD W., The Hagan Corp., Cleveland

Pennsylvania

GUTHRIE, JOHN F., Mechanical Engineer, Abrasive Co., Philadelphia
HULBURT, WYNNE D., Assistant Engineer, Maccar Truck Co., Scranton
SCRANNAGE, LAWRENCE E., Assistant Shop Superintendent, Philadelphia Navy Yard, Philadelphia

West Virginia

FREEMAN, ROGER M., Supervising Engineer, Navy Department, U. S. Naval Ordnance Plant, So. Charleston

SUMMARY

New Applications	181
CHANGE OF GRADING	
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Promotion from Associate-Member	8
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Total	200